WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor substrate comprising the processes of:

forming an insulation film on at least a surface of a semiconductor substrate main body;

forming an ion shield member having a predetermined shape on said insulation film;

implanting ions into said semiconductor substrate main body from a side on which said insulation film is formed, to thereby form an ion implantation layer;

removing said ion shield member;

laminating said insulation film and a support substrate onto each other; and

separating said semiconductor substrate main body from said support substrate at a portion of said ion implantation layer.

2. A method of manufacturing a semiconductor substrate according to claim 1, wherein the process of separating said semiconductor substrate main body at the portion of said ion implantation layer comprises the process of separating said semiconductor substrate main body at a peak position of an ion concentration in said ion implantation layer.

3. A method of manufacturing a semiconductor substrate according to claim 1, wherein the process of forming said ion shield

member comprises the processes of: forming an ion shield film made of resist or oxide film on said insulation film; and patterning said ion shield film to a predetermined shape to thereby form said ion shield member.

4. A method of manufacturing a semiconductor substrate according to claim 1, wherein a shape of an outer edge of said ion shield member is tapered toward an outermost edge thereof.

5. A method of manufacturing a semiconductor substrate according to claim 1, wherein said semiconductor substrate main body comprises single crystal silicon.

6. A method of manufacturing a semiconductor substrate according to claim 1, wherein said support substrate comprises an optically transparent material.

7. A method of manufacturing a semiconductor substrate according to claim 6, wherein said optically transparent material comprises glass.

8. A method of manufacturing a semiconductor substrate according to claim 6, wherein said optically transparent material comprises quartz.

9. A method of manufacturing a semiconductor substrate

according to claim 1, wherein a thermally conductive film is buried in the support substrate used in the laminating process.

10. A semiconductor substrate comprising:

a support substrate;

an insulation film laminated on a surface of said support substrate; and

a semiconductor layer formed on said insulation film, said semiconductor layer having such a structure that thicknesses of said semiconductor layer are different in a layer thereof.

11. A semiconductor substrate according to claim 10, wherein said semiconductor layer comprises a single crystal semiconductor layer.

12. An electro-optical apparatus comprising:

a pair of a support substrate and an opposite substrate sandwiching electro-optical substance therebetween;

a plurality of first switching elements arranged in a form of matrix in correspondence with a pixel array, in an image display region of said support substrate; and

a plurality of second switching elements arranged in a peripheral region, which is located around said image display region, of said support substrate and at least partially constituting a peripheral circuit,

wherein a thickness of a semiconductor layer in the image

display region constituting said first switching elements is thinner than a semiconductor layer in the peripheral region constituting said second switching elements.

13. An electro-optical apparatus according to claim 12, wherein said semiconductor layer comprises a single crystal semiconductor layer.

14. An electro-optical apparatus according to claim 12, wherein said peripheral circuit is a drive circuit.

15. An electronic equipment comprising a light source for emitting light, an electro-optical device for modulating the emitted light in correspondence with image information and a projecting device for projecting the modulated light,

said electro-optical apparatus comprising:

a pair of a support substrate and an opposite substrate sandwiching electro-optical substance therebetween;

a plurality of first switching elements arranged in a form of matrix in correspondence with a pixel array, in an image display region of said support substrate; and

a plurality of second switching elements arranged in a peripheral region, which is located around said image display region, of said support substrate and at least partially constituting a peripheral circuit,

wherein a thickness of a semiconductor layer in the image

display region constituting said first switching elements is thinner than a semiconductor layer in the peripheral region constituting said second switching elements.

16. An electronic equipment according to claim 15, wherein said semiconductor layer comprises a single crystal semiconductor layer.